

IN THE CLAIMS

Claim 1 (original): A drive circuit to supply drive current to a load resistor that is connected to a first power voltage supply element, comprising:

a current output MOS transistor connected in series with the load resistor,
a drive part that is connected to a second power voltage supply element and that supplies a drive signal to the gate terminal of the current output MOS transistor, and
a clamp circuit that is connected to the second power voltage supply terminal to hold the drain terminal of the current output MOS transistor at a predetermined potential.

Claims 2-6 (cancelled)

Claim 7 (currently amended): The drive circuit of Claim 1, wherein the drive part includes:

a ~~fourth~~ first MOS transistor that is connected to the gate terminal of the current output MOS transistor and that supplies a the drive signal to the current supply output MOS transistor, and

a second current source that supplies current to the fourth MOS transistor.

Claim 8 (currently amended): The drive circuit of Claim 7 wherein the drive part further comprises a ~~third~~ second current source that is connected between the source terminal of the first MOS transistor and the reference potential of the ~~fourth~~ first MOS transistor, ~~which is being~~ an NMOS transistor, and a ~~fifth~~ second NMOS transistor that is connected between the ~~second~~ first current source and the reference potential and that operates complementarily with the ~~fourth~~ first NMOS transistor, and

the ~~second~~ first current source comprises a ~~third~~ first PMOS transistor that is connected between the second power supply voltage terminal and the ~~fifth~~ first NMOS transistor and whose gate terminal and drain terminal are connected together, and a ~~fourth~~ second PMOS transistor that is connected between the second power supply voltage terminal and the ~~middle~~ common connection point ~~between~~ of the gate terminal

of the current output MOS transistor and the ~~fourth~~ first NMOS transistor, and whose gate terminal is connected to the gate terminal of the ~~third~~ first PMOS transistor.

Claim 9 (currently amended): The drive circuit of Claim 8 wherein the drive part ~~has~~ further comprises a ~~second~~ first resistive element that is connected between the drain terminal of the third PMOS transistor and the drain terminal of the fifth NMOS transistor, and a ~~third~~ second resistance terminal that is connected between the second power supply voltage terminal and the gate terminal of the third PMOS transistor.